RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: _10/526,127_

Source: _PCT_

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RAW SEQUENCE LISTING   DATE: 08/18/2006
PATENT APPLICATION: US/10/526,127   TIME: 15:03:54

Input Set : A:\11656610.APP
Output Set: N:\CRF4\08182006\J526127.raw

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 3 <110> APPLICANT: NOVARTIS AG
 4         NOVARTIS PHARMA GMBH
 6 <120> TITLE OF INVENTION: OCULAR GENE THERAPY
 8 <130> FILE REFERENCE: 116566-010
C--> 10 <140> CURRENT APPLICATION NUMBER: US/10/526,127
C--> 11 <141> CURRENT FILING DATE: 2005-02-28
13 <150> PRIOR APPLICATION NUMBER: PCT/EP03/09497
14 <151> PRIOR FILING DATE: 2003-08-27
16 <150> PRIOR APPLICATION NUMBER: 60/406,470
17 <151> PRIOR FILING DATE: 2002-08-28
19 <160> NUMBER OF SEQ ID NOS: 25
21 <170> SOFTWARE: PatentIn Ver. 3.3
23 <210> SEQ ID NO: 1
24 <211> LENGTH: 183
25 <212> TYPE: PRT
26 <213> ORGANISM: Homo sapiens
28 <400> SEQUENCE: 1
29 His Ser His Arg Asp Phe Gln Pro Val Leu His Leu Val Ala Leu Asn
30   1               5                  10                  15
32 Ser Pro Leu Ser Gly Gly Met Arg Gly Ile Arg Gly Ala Asp Phe Gln
33              20                  25                  30
35 Cys Phe Gln Gln Ala Arg Ala Val Gly Leu Ala Gly Thr Phe Arg Ala
36          35                  40                  45
38 Phe Leu Ser Ser Arg Leu Gln Asp Leu Tyr Ser Ile Val Arg Arg Ala
39      50                  55                  60
41 Asp Arg Ala Ala Val Pro Ile Val Asn Leu Lys Asp Glu Leu Leu Phe
42  65                  70                  75                  80
44 Pro Ser Trp Glu Ala Leu Phe Ser Gly Ser Glu Gly Pro Leu Lys Pro
45              85                  90                  95
47 Gly Ala Arg Ile Phe Ser Phe Asp Gly Lys Asp Val Leu Arg His Pro
48          100                 105                 110
50 Thr Trp Pro Gln Lys Ser Val Trp His Gly Ser Asp Pro Asn Gly Arg
51          115                 120                 125
53 Arg Leu Thr Glu Ser Tyr Cys Glu Thr Trp Arg Thr Glu Ala Pro Ser
54      130                 135                 140
56 Ala Thr Gly Gln Ala Ser Ser Leu Leu Gly Gly Arg Leu Leu Gly Gln
57 145                 150                 155                 160
59 Ser Ala Ala Ser Cys His His Ala Tyr Ile Val Leu Cys Ile Glu Asn
60              165                 170                 175
62 Ser Phe Met Thr Ala Ser Lys
63              180
66 <210> SEQ ID NO: 2
67 <211> LENGTH: 551
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68 <212> TYPE: DNA
69 <213> ORGANISM: Homo sapiens
71 <400> SEQUENCE: 2
72 acagccaccg cgacttccag ccggtgctcc acctggttgc gctcaacagc cccctgtcag 60
73 gcggcatgcg gggcatccgc ggggccgact tccagtgctt ccagcaggcg cgggccgtgg 120
74 ggctggcggg caccttccgc gccttcctgt cctcgcgcct gcaggacctg tacagcatcg 180
75 tgcgccgtgc cgaccgcgca gccgtgccca tcgtcaacct caaggacgag ctgctgtttc 240
76 ccagctggga ggctctgttc tcaggctctg agggtccgct gaagcccggg gcacgcatct 300
77 tctcctttga cggcaaggac gtcctgaggc accccacctg gccccagaag agcgtgtggc 360
78 atggctcgga ccccaacggg cgcaggctga ccgagagcta ctgtgagacg tggcggacgg 420
79 aggctccctc ggccacgggc caggcctcct cgctgctggg gggcaggctc ctggggcaga 480
80 gtgccgcgag ctgccatcac gcctacatcg tgctctgcat tgagaacagc ttcatgactg 540
81 cctccaagta g                                                       551
84 <210> SEQ ID NO: 3
85 <211> LENGTH: 207
86 <212> TYPE: PRT
87 <213> ORGANISM: Mus musculus
89 <400> SEQUENCE: 3
90 Met Glu Thr Asp Thr Leu Leu Leu Trp Val Leu Leu Leu Trp Val Pro
91 1               5                   10                  15
93 Gly Ser Thr Gly Asp Ala Ala His Thr His Gln Asp Phe Gln Pro Val
94              20                  25                  30
96 Leu His Leu Val Ala Leu Asn Thr Pro Leu Ser Gly Gly Met Arg Gly
97          35                  40                  45
99 Ile Arg Gly Ala Asp Phe Gln Cys Phe Gln Gln Ala Arg Ala Val Gly
100      50                  55                  60
102 Leu Ser Gly Thr Phe Arg Ala Phe Leu Ser Ser Arg Leu Gln Asp Leu
103 65                  70                  75                  80
105 Tyr Ser Ile Val Arg Arg Ala Asp Arg Gly Ser Val Pro Ile Val Asn
106                  85                  90                  95
108 Leu Lys Asp Glu Val Leu Ser Pro Ser Trp Asp Ser Leu Phe Ser Gly
109              100                 105                 110
111 Ser Gln Gly Gln Leu Gln Pro Gly Ala Arg Ile Phe Ser Phe Asp Gly
112          115                 120                 125
114 Arg Asp Val Leu Arg His Pro Ala Trp Pro Gln Lys Ser Val Trp His
115      130                 135                 140
117 Gly Ser Asp Pro Ser Gly Arg Arg Leu Met Glu Ser Tyr Cys Glu Thr
118 145                 150                 155                 160
120 Trp Arg Thr Glu Thr Thr Gly Ala Thr Gly Gln Ala Ser Ser Leu Leu
121                  165                 170                 175
123 Ser Gly Arg Leu Leu Glu Gln Lys Ala Ala Ser Cys His Asn Ser Tyr
124              180                 185                 190
126 Ile Val Leu Cys Ile Glu Asn Ser Phe Met Thr Ser Phe Ser Lys
127          195                 200                 205
130 <210> SEQ ID NO: 4
131 <211> LENGTH: 624
132 <212> TYPE: DNA
133 <213> ORGANISM: Mus musculus
135 <400> SEQUENCE: 4
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136 atggagacag acacactcct gctatgggta ctgctgctct gggttccagg ttccactggt 60
137 gacgcggccc atactcatca ggactttcag ccagtgctcc acctggtggc actgaacacc 120
138 cccctgtctg gaggcatgcg tggtatccgt ggagcagatt tccagtgctt ccagcaagcc 180
139 cgagccgtgg ggctgtcggg caccttccgg gctttcctgt cctctaggct gcaggatctc 240
140 tatagcatcg tgcgccgtgc tgaccggggg tctgtgccca tcgtcaacct gaaggacgag 300
141 gtgctatctc ccagctggga ctccctgttt tctggctccc agggtcaagt gcaacccggg 360
142 gcccgcatct tttcttttga cggcagagat gtcctgagac acccagcctg ccgcagaag 420
143 agcgtatggc acggctcgga ccccagtggg cggaggctga tggagagtta ctgtgagaca 480
144 tggcgaactg aaactactgg ggctacaggt caggcctcct ccctgctgtc aggcaggctc 540
145 ctggaacaga aagctgcgag ctgccacaac agctacatcg tcctgtgcat tgagaatagc 600
146 ttcatgacct ctttctccaa atag                                     624
149 <210> SEQ ID NO: 5
150 <211> LENGTH: 8
151 <212> TYPE: PRT
152 <213> ORGANISM: Homo sapiens
154 <400> SEQUENCE: 5
155 Ala Pro Gln Gln Glu Ala Leu Ala
156   1               5
159 <210> SEQ ID NO: 6
160 <211> LENGTH: 38
161 <212> TYPE: DNA
162 <213> ORGANISM: Artificial Sequence
164 <220> FEATURE:
165 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
166       primer
168 <400> SEQUENCE: 6
169 actggtgacg cggcccatac tcatcaggac tttcagcc                       38
172 <210> SEQ ID NO: 7
173 <211> LENGTH: 32
174 <212> TYPE: DNA
175 <213> ORGANISM: Artificial Sequence
177 <220> FEATURE:
178 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
179       primer
181 <400> SEQUENCE: 7
182 aagggctatc gatctagctg gcagaggcct at                             32
185 <210> SEQ ID NO: 8
186 <211> LENGTH: 20
187 <212> TYPE: DNA
188 <213> ORGANISM: Artificial Sequence
190 <220> FEATURE:
191 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
192       primer
194 <400> SEQUENCE: 8
195 cactgcttac tggcttatcg                                           20
198 <210> SEQ ID NO: 9
199 <211> LENGTH: 29
200 <212> TYPE: DNA
201 <213> ORGANISM: Artificial Sequence
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Input Set : **A:\11656610.APP**
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203 <220> FEATURE:
204 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
205   primer
207 <400> SEQUENCE: 9
208 ctgatgagta tgggccgcgt caccagtgg   29
211 <210> SEQ ID NO: 10
212 <211> LENGTH: 32
213 <212> TYPE: DNA
214 <213> ORGANISM: Artificial Sequence
216 <220> FEATURE:
217 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
218   primer
220 <400> SEQUENCE: 10
221 aagggctatc gatctagctg gcagaggcct at   32
224 <210> SEQ ID NO: 11
225 <211> LENGTH: 35
226 <212> TYPE: DNA
227 <213> ORGANISM: Artificial Sequence
229 <220> FEATURE:
230 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
231   primer
233 <400> SEQUENCE: 11
234 gatctctaga ccaccatgca tactcatcag gactt   35
237 <210> SEQ ID NO: 12
238 <211> LENGTH: 30
239 <212> TYPE: DNA
240 <213> ORGANISM: Artificial Sequence
242 <220> FEATURE:
243 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
244   primer
246 <400> SEQUENCE: 12
247 actggagaaa gaggtttatc tagctactag   30
250 <210> SEQ ID NO: 13
251 <211> LENGTH: 18
252 <212> TYPE: PRT
253 <213> ORGANISM: Adenovirus
255 <400> SEQUENCE: 13
256 Met Arg Tyr Met Ile Leu Gly Leu Leu Ala Leu Ala Ala Val Cys Ser
257   1   5   10   15
259 Ala Ala
263 <210> SEQ ID NO: 14
264 <211> LENGTH: 96
265 <212> TYPE: DNA
266 <213> ORGANISM: Artificial Sequence
268 <220> FEATURE:
269 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
270   primer
272 <400> SEQUENCE: 14
273 gatctctaga ccaccatgag gtacatgatt ttaggcttgc tcgcccttgc ggcagtctgc 60

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274 agcgcggccc atactcatac tcatcaggac tttcag                        96
277 <210> SEQ ID NO: 15
278 <211> LENGTH: 29
279 <212> TYPE: DNA
280 <213> ORGANISM: Artificial Sequence
282 <220> FEATURE:
283 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
284       primer
286 <400> SEQUENCE: 15
287 atcgatcata ctcatcagga ctttcagcc                                 29
290 <210> SEQ ID NO: 16
291 <211> LENGTH: 29
292 <212> TYPE: DNA
293 <213> ORGANISM: Artificial Sequence
295 <220> FEATURE:
296 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
297       primer
299 <400> SEQUENCE: 16
300 gcggccgcct atttggagaa agaggtcat                                 29
303 <210> SEQ ID NO: 17
304 <211> LENGTH: 23
305 <212> TYPE: DNA
306 <213> ORGANISM: Artificial Sequence
308 <220> FEATURE:
309 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
310       primer
312 <400> SEQUENCE: 17
313 tttttttttc agtgtaaaag gtc                                       23
316 <210> SEQ ID NO: 18
317 <211> LENGTH: 19
318 <212> TYPE: DNA
319 <213> ORGANISM: Artificial Sequence
321 <220> FEATURE:
322 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
323       primer
325 <400> SEQUENCE: 18
326 cagatgacat cctggccag                                            19
329 <210> SEQ ID NO: 19
330 <211> LENGTH: 22
331 <212> TYPE: DNA
332 <213> ORGANISM: Artificial Sequence
334 <220> FEATURE:
335 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
336       primer
338 <400> SEQUENCE: 19
339 ctatacagga aagtatggca gc                                        22
342 <210> SEQ ID NO: 20
343 <211> LENGTH: 118
344 <212> TYPE: DNA
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VERIFICATION SUMMARY   DATE: 08/18/2006
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L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date